

CLAIMS

- 1.(currently amended) A refractory article for use in the casting of molten metal comprising a carbon-containing refractory piece having a first outer surface, an insulating coating substantially covering the entire first outer surface thereby forming a second outer surface ~~having a second outer surface and covering at least a portion of the first outer surface~~, and a glaze covering at least a portion of the second outer surface.
- 2.(original) The refractory article of claim 1, wherein the refractory piece comprises a carbon-bonded refractory composition.
- 3.(original) The refractory article of claim 1, wherein the refractory piece comprises a nozzle.
- 4.(original) The refractory article of claim 3, wherein the nozzle comprises a thin-slab nozzle.
- 5.(original) The refractory article of claim 1, wherein the insulating coating is made from an aqueous suspension comprising 20-80 wt.% ceramic matrix, 5-40 wt.% insulating microspheres, 0.5-15 wt.% one or more binders, 5-20 wt.% of a metal capable of melting under preheat conditions, and up to 25 wt.% water.
- 6.(original) The refractory article of claim 1, wherein the glaze comprises a composition resistant to oxygen diffusion.

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[7-18. (canceled)]

- 19.(new) A refractory article for use in the casting of molten metal comprising:
- a) a carbon-containing refractory piece having a first outer surface;
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- b) an insulating coating comprising insulating microspheres and covering at least a portion of the first outer surface thereby forming a second outer surface; and
- c) a glaze covering at least a portion of the second outer surface.
- 20.(new) The refractory article of claim 19, wherein the refractory piece comprises a carbon-bonded refractory composition.
- 21.(new) The refractory article of claim 19, wherein the refractory piece comprises a nozzle.
- 22.(new) The refractory article of claim 1, wherein the insulating coating is made from an aqueous suspension comprising 20-80 wt.% ceramic matrix, 5-40 wt.% insulating microspheres, 0.5-15 wt.% one or more binders, 5-20 wt.% of a metal capable of melting under preheat conditions, and up to 25 wt.% water.
- 23.(new) The refractory article of claim 19, wherein the glaze comprises a composition resistant to oxygen diffusion.
- 24.(new) A refractory article comprising a carbon-containing refractory piece having an interior surface defining a bore for flowing molten metal therethrough and a first outer surface, an insulating coating substantially covering the entire first outer surface thereby forming a second outer surface, and a glaze covering at least a portion of the second outer surface.